



- 1. (Currently Amended) A plasma processing apparatus having a vacuum chamber for generating plenty of inductively coupled plasmas therein, comprising:
- a first very high frequency power source that supplies a very high frequency power having a frequency of 20 to 300MHz ranging from more than 30 MHz to 300 MHz; and

a plurality of antenna units, each comprising a coil consisting of a single turn, being electrically parallel-connected with each other and receiving the very high frequency power from the first very high frequency power source;

an antenna being comprised of the plurality of antenna unit;

wherein the vacuum chamber has a reaction space where the inductively coupled plasmas are generated by the plurality of antenna units.

- 2. (Original) An apparatus according to claim 1, wherein one of the antenna units has at least one variable load that is connected in series.
- 3. (Original) An apparatus according to claim 2, wherein the antenna units having at least one variable load is located in an outer part of the antenna.
- 4. (Original) An apparatus according to claim 3, wherein the variable load is a variable capacitor.
- 5. (Original) An apparatus according to claim 1, further comprising an impedance matching box that is connected to the very high frequency power source and the antenna.
- 6. (Previously amended) An apparatus according to claim 5, wherein the parallel-connected antenna units maintain a resonance state therebetween.
- 7. (Original) An apparatus according to claim 6, further comprising a chuck in the vacuum chamber for mounting a substrate thereon.
- 8. (Original) An apparatus according to claim 7, further comprising a second very high frequency power source that supplies a very high frequency power having a frequency of 20 MHz to 300 MHz to the chuck.
 - 9. (Currently amended) An RF power supplying apparatus, comprising:

a very high frequency power source supplying a very high frequency power having a frequency of 20 MHz to 300 MHz ranging from more than 30 MHz to 300 MHz;

an impedance matching box connected to the very high frequency power source;

a plurality of antenna units, <u>each comprising a coil antenna consisting of a single turn</u>, <u>being electrically</u> connected in parallel with each other; and

an antenna being comprised of the plurality of antenna units;

wherein each antenna unit has at least one variable capacitor an a coil antenna.

Wherein the variable capacitor is located outside the coil antenna with electrically series connection with the coil antenna.

10. (Currently amended) A plasma processing apparatus having a vacuum chamber for generating plenty of inductively coupled plasmas therein, comprising:

a first very high frequency power source that supplies a very high frequency power having a frequency greater than 30MHz ranging from greater than 30 MHz to 300 MHz; and

a plurality of antenna units being <u>electrically</u> parallel-connected with each other and receiving the very high frequency power from the first very high frequency power source;

an antenna being comprised of the plurality of antenna unit;

an antenna coil in each antenna unit consisting of a single turn;

wherein each antenna unit has at least one variable capacitor that is located outside the antenna coil with electrically series connection with the coil antenna; and

wherein the vacuum chamber has a reaction space where the inductively coupled plasmas are generated by the plurality of antenna units.

- 11. (Currently amended) An RF power supplying apparatus, comprising:
 - a very high frequency power source supplying a very high frequency power;

an impedance matching box connected to the very high frequency power source in parallel with each other;

a plurality of antenna units, each comprising an antenna coil consisting of a single turn, electrically connected in parallel with each other; and

an antenna being comprised of the plurality of antenna units-;

wherein each antenna unit has at least one variable capacitor that is located outside the antenna coil with electrically series connection with the coil antenna.